# Some other insects that may be mistaken for Bagrada Bug

#### The Harlequin Bug (Murgantia histrionica)

The shield-shape and black and red color pattern are similar between these two stink bugs; however Bagrada Bug has more white on it than the Harlequin Bug and is much smaller as an adult (Bagrada Bug is about 1/4



inch and Harlequin Bug is 1/2 -3/4 inch long). Note: the Harlequin Bug is actually also a pest species, but one that has been well-established in the U.S. for over 100 years.

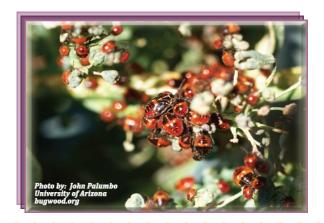


## Ladybugs or Ladybird Beetles (family Coccinellidae)

Many are marked in orange/red and black, but are more oval or circular in shape. These insects, because of their habit of feeding on other insect pests, like aphids, are considered to be beneficial.



Photo by: Surendra Dara, Dow AgroSciences pest.ceris.purdue.edu



For more information on other invasive insect species of concern in Idaho and how you can help keep them out or help stop their establishment if they arrive here, please go to the Idaho State Department of Agriculture website at

http://www.agri.idaho.gov/Categories/ PlantsInsects/RegulatedAndInvasiveInsects/ Insectpestwatchlist.php

### Idaho State Department of Agriculture Division of Plant Industries

2270 Old Penitentiary Road Boise, Idaho 83712 (208) 332-8620





A new potential invasive pest that could impact Idaho gardeners!



## The Bagrada Bug is in the U.S. and on the move!

During the summer of 2008 the first Bagrada Bugs (*Bagrada hilaris* (Burmeister)) found in the US were collected in Los Angeles County, CA. Its original home is southern and eastern Africa, southern Asia and southern Europe. Since first appearing in L.A. it has quickly spread to all California counties in the southern half of the state and has moved north and east, currently being reported in Arizona, Nevada, New Mexico, Texas and Utah. Florida has not found an established population yet, but has intercepted the insect over a dozen times in trucks carrying plant material across the state's borders.

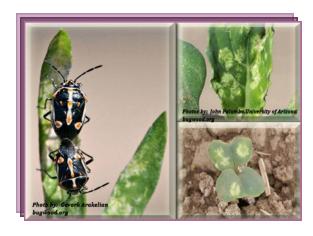
Because of its ability to easily survive transport, become established in new areas, and feed on a wide variety of common garden crops, ornamental plants and weeds it is important to keep watch in Idaho for its presence. If Bagrada Bug does appear here attempting to curtail its establishment is a vital concern.



**Please keep** an eye open for the Bagrada Bug. If you believe you've found one, please collect a specimen in a plastic container or take a clear digital photograph and get the specimen/photo to your local Extension Office or contact the Idaho State Department of Agriculture (208-332-8620) to have the identification verified.

## Why we don't want to allow the Bagrada Bug to establish in Idaho

The preferred foods of Bagrada Bug are cultivated plants in the *Brassica* genus: crops including cabbage, chard, collard greens, cauliflower, broccoli, kale, turnips, radish, mustard greens and arugula. It can also survive and build up populations on common related weeds such as shepherd's purse, pepperweed and various wild mustards. When it attacks seedlings or young plants, feeding damage will often kill the plants almost immediately. Feeding on older plants usually results in scorched-looking leaves, stunting, blind terminals or forked multiple heads.



In the absence of cole crops, or if populations build up to levels resulting in migration of the pests to new plants, they have been recorded feeding on and damaging corn, sunflowers, cantaloupe, melon, peppers, potato, beans, barley, wheat and tomatoes as well as ornamental plants such as sweet alyssum, rockcress, wallflower, nasturtiums and candytuft.

### Bagrada Bug Biology

The Bagrada Bug is a true bug in the Stink Bug family (Pentatomidae), so its method of feeding is sucking plant juices from stems, leaves, flowers and fruit using its needle-like mouthparts. At the same time, digestive enzymes are injected into the plant causing additional damage.

One to several generations a year are possible depending on climatic conditions and food quality. The insect overwinters as an adult, often hiding in weeds or leaf litter. When weather warms in the spring, eggs are laid – sometimes on the underside of leaves, but often in the soil.





Tiny nymphs emerge from the eggs and while feeding on their plant host grow, shedding their skins four or five times before becoming winged adults. It should be noted that many species of immature stink bugs are colored with various patterns of red/orange/black, so it is often difficult to determine what species is present while in the nymphal stage. At that point the host plant may be a better indicator of the stink bug species, rather than insect appearance.

**Adult Bagrada Bugs** feed on the same plants as the nymphs. They are capable of flight and was most active during the heat of the day. When weather is cooler, they may spend time on the

soil near the base of the plant,

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